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Accessible Version

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The Honorable Karen Bass
Chair
Committee on Foreign Affairs
Subcommittee on Africa, Global Health,
Global Human Rights,
and International Organizations
House of Representatives

The Honorable Lloyd Doggett
House of Representatives

Global Tobacco Control: U.S. Efforts Have Primarily Focused on Research and Surveillance

The United Nations' (UN) World Health Organization (WHO) has reported that tobacco use is one of the world's leading causes of preventable deaths, killing over 8 million people each year—almost three times the number that die from tuberculosis, HIV/AIDS, and malaria combined.[1] The majority of those deaths occur in low- and middle-income countries.

To address this problem, WHO's Framework Convention on Tobacco Control (FCTC) was adopted by the World Health Assembly in 2003 and came into force in 2005. The FCTC's stated objective is to protect people from the consequences of tobacco consumption and exposure to tobacco smoke by providing a framework for implementing tobacco control measures at the national, regional, and international levels.[2] The U.S. government signed the FCTC in 2004 but has not ratified it. The Department of Health and Human Services (HHS), the U.S. Agency for International Development (USAID), and the Department of State (State) engage in global tobacco control efforts.

You asked us to review U.S. global tobacco control efforts. This report examines U.S. agencies' funding and activities related to global tobacco control in fiscal years 2015 through 2018.

To examine agencies' funding and activities, we reviewed data and documentation from HHS, USAID, and State and met with officials from each agency.[3] We reviewed obligations data

[1]According to WHO, tobacco products include smoked products, such as cigarettes and cigars, as well as smokeless products that are consumed through the mouth or nose without combustion, such as chewing tobacco. Most tobacco consumed throughout the world is in the form of smoked products.

[2]The FCTC defines tobacco control as "a range of supply, demand, and harm reduction strategies that aim to improve the health of a population by eliminating or reducing their consumption of tobacco products and exposure to tobacco smoke."

[3]In addition to meeting with HHS, USAID, and State officials, we met with officials from the Office of the U.S. Trade Representative (USTR). USTR officials noted that the proposed Trans-Pacific Partnership was the only U.S.-negotiated trade agreement to explicitly include a provision on tobacco regulation. In particular, the partnership would have allowed parties to prohibit private entities from using investor-state dispute settlement to challenge government tobacco regulations, which, according to USTR officials, would have created a "safe harbor for FDA tobacco regulation."

covering all HHS and USAID grants, contracts, and cooperative agreements that the agencies identified as pertaining to tobacco control during this period, and we examined award documentation for both agencies' global tobacco control awards.[4] To determine the reliability of these data, we reviewed information about HHS and USAID processes for collecting and verifying obligations data. We also checked the data for accuracy and completeness and, after working with HHS and USAID officials to correct any discrepancies, determined that these data were sufficiently reliable for calculating U.S. obligations for global tobacco control efforts. We analyzed HHS documentation and met with officials from HHS's Centers for Disease Control and Prevention (CDC), Food and Drug Administration (FDA), National Institutes of Health (NIH), and Office of Global Affairs. On the basis of USAID information about mission and bureau obligations related to global tobacco control, we determined that only USAID's Global Development Lab obligated funds for tobacco control awards during the period covered by our review. In addition, we reviewed documentation and interviewed officials from WHO and the Pan American Health Organization (PAHO) to determine the nature of any collaboration and information exchanges between U.S. agencies and these UN health organizations and to understand the United States' role in funding WHO and PAHO global tobacco control efforts. See enclosure I for a more detailed discussion of our objectives, scope, and methodology.

We conducted this performance audit from June 2018 to August 2019 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Prevalence and Consequences of Tobacco Use

According to WHO, in 2016, 1.1 billion people worldwide smoked tobacco and at least 380 million used smokeless tobacco. Eighty-seven percent of smokers and 65 percent of smokeless-tobacco users were male. WHO also estimated in 2016 that about 20 percent of adults worldwide were tobacco smokers during that year and that about 7 percent of children aged 13 to 15 years worldwide were cigarette smokers. WHO reported that smoking had decreased for both men and women since 2000 and would continue to decrease through 2025, but not enough to meet global targets.[5]

According to WHO, tobacco use kills almost three times the number of people who die from tuberculosis, HIV/AIDS, and malaria combined. For details about the number of deaths caused by tobacco use and three major diseases and about tobacco use by region and country income level, see enclosure II.

However, the U.S. government withdrew from the agreement in January 2017, and USTR officials confirmed that the agency did not engage in any other global tobacco-related efforts during the period covered by our review.

[4]We did not examine State obligations data or award documentation, because State does not obligate funds for tobacco control.

[5]The World Health Assembly has adopted a target of reducing the global prevalence of tobacco use by 30 percent by 2025, relative to 2010 tobacco use rates, for people 15 years and older.

Global Tobacco Control Roles for UN Health Organizations

WHO. WHO's primary role is to direct and coordinate international health programs within the UN system. Its main areas of work include noncommunicable and communicable diseases as well as preparedness, surveillance, and response. WHO's Department for the Prevention of Noncommunicable Diseases focuses on reducing the major risk factors for noncommunicable diseases, including tobacco use. In particular, its Tobacco Free Initiative focuses on three core areas of global tobacco control: (1) tobacco control economics, (2) national capacity building, and (3) surveillance and information systems for tobacco control. WHO is funded through assessed and voluntary contributions, including contributions from the United States.[6]

PAHO. PAHO plays dual roles as (1) the specialized Inter-American health agency for the Organization of American States and (2) the Regional Office for the Americas under WHO. PAHO's tobacco control team works to reduce the consequences of tobacco use in the Americas region, including helping member countries implement tobacco control measures promoted by WHO. PAHO is funded through assessed and voluntary contributions, including contributions from the United States.

FCTC

The FCTC was the first treaty negotiated under WHO auspices.[7] The treaty includes 38 articles addressing issues such as the reduction of demand for tobacco, the supply of tobacco, and scientific and technical cooperation between treaty parties (including Article 20, which focuses on research, surveillance, and the exchange of information). Because the U.S. government has not ratified the FCTC,[8] the United States has observer status, does not have the right to vote in the FCTC Conference of the Parties, and is not legally bound by the treaty's provisions.[9]

WHO Key Tobacco Demand Reduction Measures

To assist country-level implementation of the FCTC, WHO identified five key measures that promote evidence-based tobacco demand reduction, which are outlined in the treaty articles (see table 1). In a report jointly published in 2016, WHO and HHS's National Cancer Institute highlighted evidence supporting the effectiveness of the measures.[10] According to WHO, the tobacco demand reduction measures are complementary and synergistic. For example, increasing taxation will help tobacco users quit, reduce the number of new tobacco users, and protect people from second-hand smoke, while anti-tobacco advertising will educate people about the health risks of tobacco use, alter public perceptions of smoking, and facilitate political decision-making. Academic researchers have also underscored the effectiveness of each of WHO's five key tobacco demand reduction measures as well as a combination of the measures.

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[6]Assessed contributions come from WHO member states and are distributed to program areas. Voluntary contributions come from member states and donors, such as nonprofits or individuals, and are designated for a specific health area or project.

[7]The FCTC was originally adopted by the World Health Assembly and is now managed by an independent secretariat in collaboration with WHO, according to WHO Secretariat officials.

[8]As of May 2019, 181 parties had ratified the FCTC.

[9]According to WHO FCTC documentation, the Conference of the Parties is the FCTC's governing body and comprises all parties to the convention. Regular sessions of the Conference of the Parties are held every 2 years, most recently in October 2018. The Conference of the Parties reviews the implementation of the FCTC; takes the decisions necessary to promote its effective implementation, and may also adopt protocols, annexes, and amendments to the convention.

[10]National Cancer Institute and World Health Organization, *Monograph 21: The Economics of Tobacco and Tobacco Control*, NIH Publication No. 16-CA-8029A (Bethesda, Md.: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; and Geneva, Switzerland: World Health Organization, 2016).

Table 1: WHO's Key Tobacco Demand Reduction Measures

Measure	Policies and interventions
Higher tobacco taxes	Increase tax rates for tobacco products and ensure that these rates are adjusted periodically to keep pace with inflation and rise faster than consumer purchasing power. Strengthen tax administration to reduce the illicit trade in tobacco products.
Public bans on smoking indoors	Enact and enforce completely smoke-free environments in health-care and educational facilities and in all indoor public places including workplaces, restaurants, and bars.
Quit assistance	Strengthen health systems so they can make tobacco cessation advice available as part of primary health care. Support "quit lines" and other community initiatives in conjunction with easily accessible, low-cost pharmacological treatment where appropriate.
Warning labels and awareness campaigns	Require effective package warning labels (i.e., health warnings on the outside of tobacco packaging that are large and clear and describe the harmful effects of tobacco use); implement counter-tobacco advertising; and obtain free media coverage of anti-tobacco activities.
Bans on tobacco advertising, promotion, and sponsorship	Enact and enforce effective legislation that comprehensively bans any form of direct or indirect tobacco advertising, promotion, and sponsorship.

Source: GAO analysis of World Health Organization (WHO) information. | GAO-19-533R

Note: WHO refers to these five measures, in addition to surveillance, as the MPOWER measures.

Parties to the FCTC agree to recognize and implement the FCTC measures that are the basis for WHO's five key tobacco demand reduction measures. These five key measures are an integral part of the WHO Action Plan for the Prevention and Control of Non-communicable Diseases, which was presented in 2008 at the 61st session of the World Health Assembly.

Surveillance and Research

According to WHO, rigorous surveillance of tobacco use is necessary to obtain baseline information, target activities, track progress, and evaluate the results of tobacco control interventions. In 1998, WHO and CDC partnered to design surveys to help countries implement the Global Tobacco Surveillance System (GTSS)—the largest global public health surveillance system developed and maintained to date. The GTSS aims to enhance country capacity to design, implement, and evaluate tobacco control interventions and provide surveillance to help FCTC parties measure their progress toward treaty goals.[11] When the GTSS was established in 1999, its initial focus was the Global Youth Tobacco Survey, a survey of children aged 13 to 15 years that is conducted in schools. In 2007, the GTSS was extended to include the Global Adult Tobacco Survey, a household survey of people 15 years and older. WHO encourages countries to implement these youth and adult surveys every 5 years. However, only one in three countries, representing 39 percent of the world's population, monitors tobacco use by administering nationally representative youth and adult surveys at least once every 5 years, according to WHO information.

The FCTC requires that parties to the treaty establish, as appropriate, programs for national, regional, and global surveillance of the magnitude, patterns, determinants, and consequences of tobacco consumption and exposure to tobacco smoke. The FCTC further states that parties

[11]The GTSS comprises (1) the Global Youth Tobacco Survey—a nationally representative school-based survey of students aged 13 to 15 years; (2) the Global School Personnel Survey—a survey of teachers and administrators from the same schools that participate in the Global Youth Tobacco Survey; (3) the Global Adult Tobacco Survey—a nationally representative household survey of people 15 years and older; and (4) the Global Health Professions Student Survey—a survey of third-year students pursuing degrees in dentistry, medicine, nursing, or pharmacy.

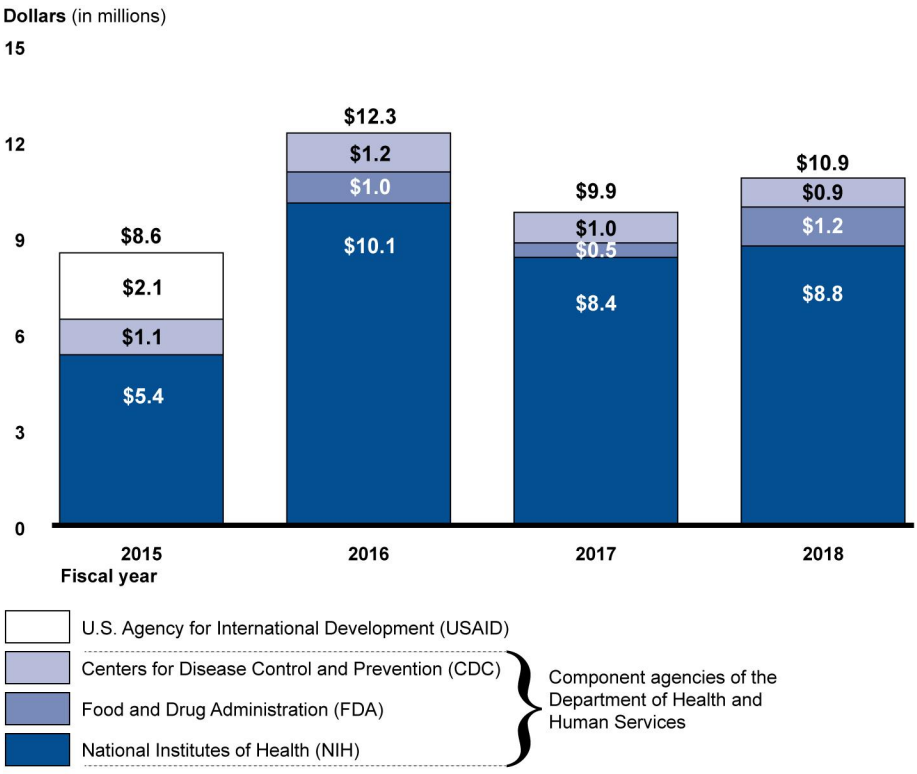
should integrate these programs into national, regional, and global health surveillance programs, so that collected data can be compared and analyzed on regional and international levels.

In addition, the FCTC emphasizes the importance of research and the exchange of information. In particular, the FCTC requires that parties develop and promote national research and coordinate tobacco control research at the regional and international levels to, among other things, address the determinants and consequences of tobacco consumption and exposure to tobacco smoke. Moreover, the FCTC requires parties, subject to national law, to promote and facilitate the exchange of publicly available scientific, technical, socioeconomic, commercial, and legal information relevant to the FCTC.

U.S. Global Tobacco Control Efforts Have Primarily Focused on Research and Surveillance

In fiscal years 2015 through 2018, the United States obligated about $41.6 million for 47 global tobacco control awards focused on tobacco research grants and surveillance activities. HHS components NIH, CDC, and FDA together obligated the largest amount—about $39.5 million for 41 awards. USAID obligated the remainder of U.S. funding—about $2.1 million—for six tobacco research awards in five countries. (Fig. 1 shows the HHS components' and USAID's obligated funding for global tobacco control awards in fiscal years 2015 through 2018.) State did not fund any global tobacco control awards directly but is the largest contributor to WHO and PAHO, providing 22 percent and 59 percent, respectively, of those organizations' assessed contributions.

Figure 1: Funding Obligated by U.S. Agencies for Global Tobacco Control Awards, Fiscal Years 2015–2018



Source: GAO analysis of USAID and Department of Health and Human Services data. | GAO-19-533R

Note: USAID had six active projects during this period, each of which was implemented in collaboration with the National Academy of Sciences. According to USAID officials, USAID obligated funds to the National Academy of Sciences for all six of these projects in fiscal year 2015, and the National Academy of Sciences managed and expended these funds in fiscal years 2015 through 2018.

Accessible Data for Figure 1: Funding Obligated by U.S. Agencies for Global Tobacco Control Awards, Fiscal Years 2015–2018

Fiscal Year	NIH	FDA	CDC	USAID	Total
2015	$5,376,520	$0	$1,112,601	$2,067,328	$8,556,449
2016	$10,111,348	$971,569	$1,214,296	$0	$12,297,213
2017	$8,415,803	$452,888	$952,371	$0	$9,821,062
2018	$8,771,598	$1,216,472	$903,371	$0	$10,891,122

HHS Funding and Activities Focused on Research and Surveillance

As the leading U.S. government source of global tobacco research and surveillance, HHS is the largest U.S. government contributor to global tobacco control in terms of amounts of funding and number of activities. In fiscal years 2015 through 2018, HHS component agencies NIH, CDC, and FDA obligated a total of about $39.5 million—95 percent of the $41.6 million that U.S. agencies obligated for global tobacco control awards. NIH obligated the majority of this funding (about $32.7 million). About $35.8 million of HHS obligations was for research-focused awards, and about $3.7 million was for surveillance activities. NIH, CDC, and FDA also participate in information exchanges through international engagement and with other U.S. agencies.[12]

NIH. In fiscal years 2015 through 2018, NIH obligated a total of about $32.7 million for 32 global tobacco control research awards. According to NIH officials, NIH supports and conducts research to build the evidence base needed for global tobacco prevention and control. NIH supports these efforts through various mechanisms, including grant awards. NIH awarded each grant to a researcher associated with an institution, such as a university. Examples of NIH-supported tobacco control research include the following:

- After reporting that depictions of smoking in movies was associated with youth smoking in the United States, in fiscal years 2015 and 2016, NIH funded a grant that paired researchers who had originally linked smoking in movies to youth smoking in the United States with researchers in Argentina and Mexico who began studying the same link in their respective countries. The grant's purpose was to enhance research on movie and marketing risk factors for youth smoking.[13]
- In fiscal years 2017 and 2018, NIH funded a grant to study the feasibility and acceptability of text messages to increase smoking cessation in Vietnam. According to the researchers, some lower-middle-income countries like Vietnam lack effective smoking cessation interventions.

According to NIH officials, all NIH-funded scientists are encouraged to disseminate the results of their research so that the evidence collected through the research can serve as a resource to inform additional publications and other researchers.

In addition to obligating funds for global tobacco control research grants, according to NIH officials, NIH has collaborated with UN health organizations, provided informal advisory services, and participated in international conferences. For example, in 2016, NIH collaborated with WHO to produce *Monograph 21: The Economics of Tobacco and Tobacco control*, which featured contributions of many leading researchers in the field and included topics such as patterns of

[12]According to HHS's Office of Global Affairs officials, while the office does not have specific funding or programming related to global tobacco control, it coordinates HHS's participation in certain high-level international meetings.

[13]NIH funded the project in fiscal years 2012 through 2016. We are reporting only related obligations in fiscal years 2015 and 2016, to align with the period covered by our review.

tobacco use, the economic costs of tobacco use, and the impact of taxes on the demand for tobacco products. According to NIH officials, staff in NIH's National Cancer Institute have assisted WHO in providing information and advice to several WHO working groups by, for example, participating in conference calls and commenting on draft publications and documents.

Moreover, NIH's National Cancer Institute is a current and founding member of WHO's Tobacco Laboratory Network.[14] According to WHO documentation, the network seeks, among other things, to establish global tobacco testing and research capacity to test tobacco products for regulatory compliance, to research and develop standards for contents and emissions testing, to share tobacco research and testing standards and results, and to inform risk assessment activities related to the use of tobacco products.

CDC. In fiscal years 2015 through 2018, CDC obligated a total of about $4.2 million for four awards. Three of these awards supported global tobacco use surveillance, and the fourth award supported tobacco control training for health care providers.

- CDC obligated about $2.2 million for two cooperative agreements with WHO and PAHO, respectively, to support WHO's Global Youth Tobacco Survey.[15] According to CDC officials, since fiscal year 2015, implementing partners have conducted the survey in 58 countries. CDC officials also stated that the survey has provided credible data that countries can use to meet their FCTC reporting requirements and measure country progress in tobacco control efforts. In addition, CDC obligated $1.5 million for an award to a contractor to provide logistical and technical assistance to support the survey, including scanning and digitizing data.
- According to CDC officials, in fiscal year 2016, CDC obligated $450,000 for a 3-year award to an implementing partner to train pediatricians and other pediatric health care providers in foreign countries to implement tobacco control strategies.

Besides obligating funds to support the Global Youth Tobacco Survey, CDC houses GTSS data and makes the data publicly available on its website. CDC also advises countries and UN health organizations regarding tobacco-specific questions for other surveys as part of its broad support for tobacco surveillance, according to CDC officials. According to CDC documentation, to maintain consistency and comparability in the surveillance of tobacco use, a standard set of questions should be implemented across various surveys. CDC, in collaboration with WHO and other partners, created the Tobacco Questions for Surveys to serve as a standardized set of primary questions in multiple-risk-factor surveys for countries that are not implementing the full Global Adult Tobacco Survey.[16] Since 2015, the Global Adult Tobacco Survey has been administered in 14 countries, and the Tobacco Questions for Surveys—a subset of the Global Adult Tobacco Survey—have been integrated into surveys in 40 countries.

Further, according to HHS officials, CDC participates in information exchanges with international counterparts. HHS officials said that CDC attends the World Conference on Tobacco or Health, which is held every 3 years. Moreover, according to HHS officials, CDC's Director participated in the 2018 FCTC Conference of the Parties as the leader of the observer delegation, which included representatives from NIH and FDA.

[14]According to WHO, it established the Tobacco Laboratory Network in 2005.

[15]According to WHO, the Global Youth Tobacco Survey is a school-based survey designed to enhance the capacity of countries to monitor tobacco use among youths and to guide the implementation and evaluation of tobacco prevention and control programs.

[16]CDC and its partners created the Tobacco Questions for Surveys from the Global Adult Tobacco Survey Core Questionnaire. The Tobacco Questions for Surveys provides three tobacco smoking prevalence questions to be included in all surveys that measure tobacco use. Surveyors can select additional questions covering key topics as appropriate.

FDA. In fiscal years 2015 through 2018, FDA obligated a total of about $2.6 million for five global tobacco research awards.

- According to HHS officials, in August 2014, FDA entered into a 3-year cooperative agreement with WHO, providing a total of about $680,000 to identify, support, develop, conduct, and coordinate research efforts related to tobacco control laws and policies in foreign countries to directly inform and support FDA's U.S.-focused efforts. HHS officials told us that in August 2018, FDA entered into a new, 5-year cooperative agreement with WHO, providing $400,000 per year, to continue these efforts.
- According to FDA officials, FDA provided a total of over $1.5 million for a research award to examine how tobacco control policies are shaping the nicotine delivery market and for two research awards examining the impact of a ban on flavored and menthol tobacco products imposed by the government of Ontario, Canada. One of these two awards was a 2-year contract issued to an implementing partner to evaluate the impact of Ontario's ban on consumer behavior and retail marketing. According to the award agreement, FDA is interested in examining the impact of banning flavoring and menthol in all tobacco products, especially, among other things, electronic cigarettes.

FDA has become a global leader in tobacco regulation and evidence-based regulatory science, according to PAHO officials. According to HHS officials, FDA communicates with foreign governments and relevant stakeholders to learn from the efforts of international counterparts and share mutually beneficial information. FDA officials told us that FDA participates in information exchanges with other tobacco regulators and attends the World Conference on Tobacco or Health. While FDA did not send a formal delegation to the 2018 conference, nine FDA officials attended and, according to FDA officials, participated in informal meetings with other regulators to build relationships.

USAID Funding and Activities Focused on Research and Surveillance

According to USAID officials, USAID's involvement in global tobacco control is limited to research and surveillance.[17] USAID obligated a total of about $2.1 million for six awards for tobacco control research, active in fiscal years 2015 through 2018. In collaboration with the National Academy of Sciences, USAID's Global Development Lab issued two research grants to tobacco researchers in Indonesia and four grants to researchers in, respectively, Uganda, Vietnam, the Philippines, and Egypt.[18]

- For one of the grants in Indonesia, USAID collaborated with the National Academy of Sciences to select a researcher to study the effects of secondhand smoke on pregnant women and children younger than 2 years. The recipient of the other grant studied the effect of secondhand smoke exposure and low-birthweight prevalence.
- In Uganda, Vietnam, and the Philippines, the grant recipients studied the effects of tobacco exposure on patients with tuberculosis.

[17]USAID's strategic objectives prioritize health programming in infectious diseases, maternal and child health, and nutrition but do not address tobacco control. USAID's *Automated Directives System,* Chapter 210, states that USAID will undertake certain anti-tobacco actions related to policy dialogue and programming. Chapter 210 also states that USAID will strengthen appropriate linkages between global anti-tobacco efforts and relevant performance goals articulated in State's and USAID's joint strategic plan.

[18]All six of USAID's global tobacco control grants were issued through the Global Development Lab's Partnerships for Enhanced Engagement in Research program—an international grants program that funds scientists in developing countries who partner with U.S. government-funded researchers to address global development challenges.

- In Egypt, the grant recipient studied the impacts of health care providers' counseling of pregnant women and their families regarding smoking cessation and secondhand smoke.

In addition to providing research grants, USAID includes tobacco-related questions in its Demographic and Health Survey, a nationally representative household survey administered by an implementing partner in selected countries every 5 years. The survey provides surveillance data for a wide range of indicators in the areas of population, health, and nutrition. According to USAID officials, USAID worked with CDC to develop these questions, which are based on CDC's Tobacco Questions for Surveys.[19]

State Contributes to UN Health Organizations' Global Tobacco Control Efforts

While State does not fund any global tobacco control awards, it is responsible for engaging with WHO and PAHO on tobacco control in the context of global public health and for supporting efforts to combat noncommunicable diseases. State is also responsible for providing funding to these international health organizations through assessed contributions—dues that are not directed—and is the largest contributor to both organizations. In 2018 through 2019, State provided about $236 million to WHO and $125.2 million to PAHO—22 percent and 59 percent, respectively, of those organizations' assessed contributions during the 2-year funding cycle.

According to WHO officials, the WHO Department for Prevention of Noncommunicable Diseases and the department's Tobacco-Free Initiative use assessed contributions to carry out WHO's responsibility to, among other things, survey the progress of the 181 member countries in implementing the FCTC. According to WHO officials, before 2014, tobacco control was one of the 11 categories included in WHO's general program, which allowed WHO to track precise funding for tobacco control. However, in 2014, the member countries included tobacco control under eight newly established noncommunicable disease program categories that replaced the original 11 categories. As a result of this reorganization, WHO is unable to determine the precise amounts of assessed contributions that supported tobacco control efforts in 2015 through 2018.

According to PAHO officials, PAHO uses U.S. assessed contributions, as well as additional funding from WHO and other sources, to implement the tobacco control mandates described in its member state resolutions. Specifically, its 2017 *Strategy and Plan of Action to Strengthen Tobacco Control in the Region of the Americas 2018–2022* outlines action items to strengthen tobacco control in support of FCTC goals. According to PAHO officials, assessed contributions from all sources are pooled in a single fund and distributed to programs. As a result, PAHO does not track the amounts of individual countries' assessed contributions that are distributed to specific programs. The officials noted that PAHO is not required to track these amounts.

Agency Comments and Our Evaluation

We provided a draft of this report to HHS, USAID, and State for review and comment. We also provided excerpts of our draft report to WHO and PAHO. In its comments, reproduced in enclosure III, USAID emphasized its efforts to address smoking-related health concerns. State did not provide comments. HHS, WHO, and PAHO provided technical comments, which we incorporated as appropriate.

[19]We were not able to determine the amount of funding dedicated to these questions, because they are included in USAID's Demographic and Health Survey as part of a larger survey.

We are sending copies of this report to the appropriate congressional committees, the Secretary of Health and Human Services, the Administrator of USAID, the Secretary of State, the Director-General of WHO, the Director of PAHO, and other interested parties. In addition, the report is available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-3149 or gootnickd@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report include Leslie Holen (Assistant Director), Cheryl Goodman (Assistant Director), Jaime Allentuck (Analyst in Charge), Nicholas Jepson (Senior Analyst), Kerry Burgott, Reid Lowe, and Neil Doherty. Grace Lui and Justin Fisher provided technical assistance.

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Enclosures – 3

Enclosure I: Objectives, Scope, and Methodology

This report examines U.S. agencies' funding and activities related to global tobacco control in fiscal years 2015 through 2018.

To examine U.S. agencies' funding and activities to address global tobacco control, we reviewed agency and United Nations (UN) reports and funding data and met with officials from the Departments of Health and Human Services (HHS), State (State), and Agriculture; the U.S. Agency for International Development (USAID); and the Office of the U.S. Trade Representative. On the basis of our review of agency documentation and discussions with agency officials, we determined that the Department of Agriculture and the Office of the U.S. Trade Representative did not engage in any global tobacco control activities during the period covered by our review.

We asked HHS, USAID, and State to identify all global tobacco control awards that they had issued in fiscal years 2015 through 2018. We then reviewed obligations data covering all HHS and USAID grants, contracts, and cooperative agreements for fiscal years 2015 through 2018 and examined documentation for each agency's global tobacco control awards.[20] To determine the reliability of the obligations data, we reviewed information from HHS and USAID regarding the processes they used to collect and verify data, and we checked the data for accuracy and completeness. When we found discrepancies, we brought them to the attention of relevant agency officials and worked with the officials to make corrections. On the basis of our assessment of the data, we determined them to be sufficiently reliable to calculate U.S. obligations to global tobacco control efforts. We analyzed HHS documentation and met with officials from HHS's Centers for Disease Control and Prevention, Food and Drug Administration, National Institutes of Health, and Office of Global Affairs. We asked USAID to provide information about its missions' and bureaus' obligations related to global tobacco control. On the basis of this information, we determined that only USAID's Global Development Lab obligated funds for tobacco control awards during the period covered by our review.

In addition, we reviewed documentation and interviewed officials from the UN World Health Organization (WHO) and Pan American Health Organization (PAHO) to determine the nature of collaboration and information exchanges between U.S. agencies and these UN health organizations. We also met with WHO and PAHO officials to determine the U.S. role in funding WHO and PAHO global tobacco control efforts. Both State and the UN health organizations were able to determine the amount of funding that the United States had contributed in assessed contributions. However, neither WHO nor PAHO was able to determine the exact amount of U.S. funding that supported their global tobacco control efforts, because they do not track activity-level funding by donor countries.

We conducted this performance audit from June 2018 to August 2019 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

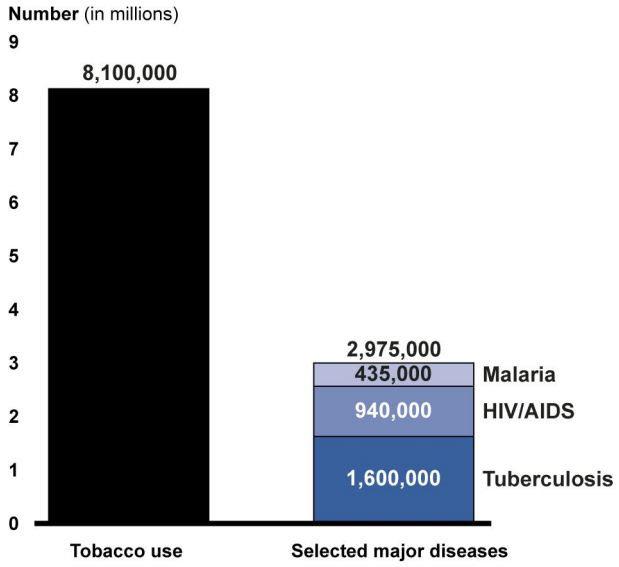
[20]State informed us that it did not issue any awards or obligate any funding for global tobacco control during the period covered by our review.

Enclosure II: Information about Global Tobacco Use

Tobacco-Related Deaths

According to the World Health Organization (WHO), tobacco use kills almost three times the number of people that die from tuberculosis, HIV/AIDS, and malaria combined (see fig. 2). WHO estimates that in 2004—the year before the Framework Convention on the Tobacco Control (FCTC) came into force—tobacco use resulted in 12 percent of deaths globally for adults older than 30 years, with the highest rates of adult deaths in the Americas and the European region (16 percent in each), followed by the Western Pacific (13 percent), Southeast Asian (10 percent), Eastern Mediterranean (7 percent), and African (3 percent) regions. In 2008, WHO reported that tobacco was a risk factor for six of the eight leading causes of death globally, including noncommunicable diseases such as lung cancer, cardiovascular disease, and infections of the respiratory system.[21] In addition, WHO noted that smoking tobacco can cause miscarriage, premature birth, birth defects, and infertility.

Figure 2: WHO Comparison of Estimated Numbers of Deaths Caused by Tobacco Use and Three Major Diseases, 2017



Source: GAO analysis of the Institute for Health Metrics and Evaluation data (estimated number of deaths caused by tobacco use); World Health Organization (WHO) (estimated numbers of deaths caused by tuberculosis and malaria); and WHO and The Joint United Nations Program on HIV/AIDS (UNAIDS) (estimated number of deaths caused by HIV/AIDS). | GAO-19-533R

Notes: For each category, estimates for calendar year 2017 are the most recent available.

According to WHO, tobacco use includes the use of cigarettes and other forms of smoked tobacco, such as cigars, and smokeless tobacco products, such as chewing tobacco, snuff, snus, and dip.

Accessible Data for Figure 2: WHO Comparison of Estimated Numbers of Deaths Caused by Tobacco Use and Three Major Diseases, 2017

Risk Factor	Number of Attributed Deaths, 2017
Tobacco use	8,100,000
Selected major diseases	2,975,000

[21]Noncommunicable diseases tend to be of long duration and result from a combination of genetic, physiological, environmental, and behavioral (e.g., smoking) factors, according to WHO.

Risk Factor	Number of Attributed Deaths, 2017
Selected major diseases: Tuberculosis	1,600,000
Selected major diseases: HIV/AIDS	940,000
Selected major diseases: Malaria	435,000

According to WHO, in 2004, tobacco use and exposure were responsible for 14 percent of all noncommunicable disease–related deaths and 5 percent of all communicable disease–related deaths, including 22 percent of all deaths from cancer and 36 percent of all deaths from respiratory diseases.

Prevalence of Global Tobacco and Trends in the Number of Smokers

According to WHO, in 2016, 1.1 billion people worldwide were smokers and at least 380 million were smokeless tobacco users.[22] In its 2018 *WHO Global Report on Trends in Prevalence of Tobacco Smoking: 2000-2025,* WHO examined tobacco use by age, gender, region, income level, and tobacco type.[23]

- **Age.** WHO estimated that, worldwide, about 20 percent of adults were tobacco smokers in 2015 and about 7 percent of children aged 13 to 15 years were cigarette smokers.[24]
- **Gender.** WHO estimated that 87 percent of smokers and 65 percent of smokeless tobacco users were male in 2016. According to WHO, as of 2016, global tobacco smoking rates for males and females 15 years or older had decreased by 25 percent since 2000 and by 17 percent since the FCTC came into force in 2005. WHO reported that smoking would continue to decrease through 2025 but that it would not decrease enough to meet UN member states' global target of a 30 percent reduction in tobacco use by 2025 relative to 2010 tobacco use rates. While females' rates were projected to decline to an average of under 5 percent by 2025, males' rates were projected to average 30 percent if current trends continued, according to WHO officials.
- **Region.** The net reduction in the number of smokers globally since 2000 reflects a decrease in WHO's Americas, European, and Western Pacific regions and an increase in WHO's African, Eastern Mediterranean, and South East Asian regions. In 2017, the prevalence of current tobacco smoking ranged from 52.8 percent in Kiribati to 3.5 percent in Ethiopia, according to WHO officials. Figure 3 displays WHO estimates of the prevalence of tobacco smoking among males and females 15 years or older, by country, in 2017.[25]

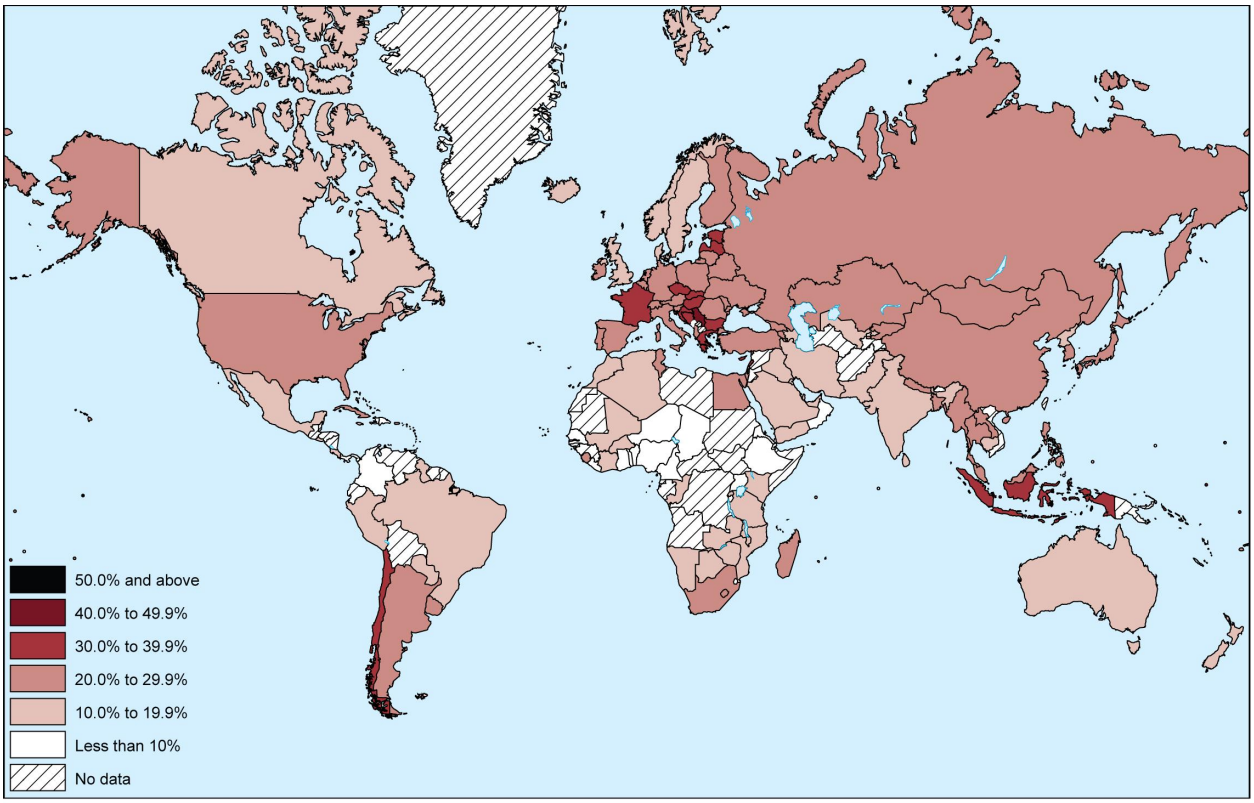
[22]According to WHO information, most of the tobacco consumed throughout the world is in the form of smoking tobacco products such as manufactured cigarettes, hand-rolled cigarettes, cigars, or water pipes. However, tobacco use may also include smokeless tobacco products, such as chewing tobacco, snuff, snus, and dip.

[23]World Health Organization, *WHO Global Report on Trends in Prevalence of Tobacco Smoking 2000-2025*, 2nd ed. (Geneva: 2018).

[24]WHO's estimate of prevalence rates for people 15 years or older was calculated with data from 146 countries where smoking behavior had been measured in at least two national surveys since 1990, so that trends could be estimated over time. WHO constructed the average estimates for the percentage of children who smoked cigarettes from tobacco use surveys conducted in 179 countries in the period 2007 through 2017 and applied the survey results to each country's UN-estimated population in 2014. WHO reported the estimated smoking rates for adults and children in the same report. See World Health Organization, *WHO Global Report on Trends in Prevalence of Tobacco Smoking 2000-2025,* 2nd ed. (Geneva: 2018).

[25]According to WHO, prevalence of smoking is higher for males than females in almost all countries that track this information. Accordingly, male tobacco smoking rates illustrate the highest smoking prevalence across the globe. We used estimates of current tobacco smoking to reflect the total male and female population who smoked tobacco at the time they were surveyed, including daily and nondaily smoking.

Figure 3: Estimated Prevalence of Tobacco Smoking among Males and Females 15 Years and Older, by Country, 2017



Sources: GAO analysis of World Health Organization data; Map Resources (map). | GAO-19-533R

Notes: We used estimates of current tobacco smoking to reflect the total population who smoked tobacco daily or nondaily at the time they were surveyed.

"Tobacco smoking" refers to smoking of any form of tobacco, including, for example, cigarettes, cigars, pipes, and water pipes and excluding smokeless tobacco products such as snuff and chewing tobacco.

Accessible Data for Figure 3: Estimated Prevalence of Tobacco Smoking among Males and Females 15 Years and Older, by Country, 2017

Country	Category
Afghanistan	no data
Albania	20.0%-29.9%
Algeria	10.0%-19.9%
Andorra	30.0%-39.9%
Angola	no data
Antigua and Barbuda	no data
Argentina	20.0%-29.9%
Armenia	20.0%-29.9%
Australia	10.0%-19.9%
Austria	20.0%-29.9%
Azerbaijan	10.0%-19.9%

Country	Category
Bahamas	10.0%-19.9%
Bahrain	10.0%-19.9%
Bangladesh	20.0%-29.9%
Barbados	less than 10%
Belarus	20.0%-29.9%
Belgium	20.0%-29.9%
Belize	no data
Benin	less than 10%
Bhutan	no data
Bolivia	no data
Bosnia and Herzegovina	30.0%-39.9%
Botswana	10.0%-19.9%
Brazil	10.0%-19.9%
Brunei Darussalam	10.0%-19.9%
Bulgaria	30.0%-39.9%
Burkina Faso	10.0%-19.9%
Burundi	less than 10%
Cabo Verde	no data
Cambodia	10.0%-19.9%
Cameroon	less than 10%
Canada	10.0%-19.9%
Central African Republic	no data
Chad	less than 10%
Chile	40.0%-49.9%
China	20.0%-29.9%
Colombia	less than 10%
Comoros	10.0%-19.9%
Congo	10.0%-19.9%
Cook Islands	20.0%-29.9%
Costa Rica	10.0%-19.9%
Côte d'Ivoire	10.0%-19.9%
Croatia	30.0%-39.9%
Cuba	20.0%-29.9%
Cyprus	30.0%-39.9%
Czech Republic	30.0%-39.9%
Democratic People's Republic of Korea	10.0%-19.9%
Democratic Republic of the Congo	no data
Denmark	10.0%-19.9%
Djibouti	no data
Dominica	no data

Country	Category
Dominican Republic	less than 10%
Ecuador	no data
Egypt	20.0%-29.9%
El Salvador	10.0%-19.9%
Equatorial Guinea	no data
Eritrea	less than 10%
Estonia	30.0%-39.9%
Ethiopia	less than 10%
Fiji	20.0%-29.9%
Finland	20.0%-29.9%
France	30.0%-39.9%
Gabon	no data
Gambia	10.0%-19.9%
Georgia	20.0%-29.9%
Germany	20.0%-29.9%
Ghana	less than 10%
Greece	30.0%-39.9%
Grenada	no data
Guatemala	no data
Guinea	no data
Guinea-Bissau	no data
Guyana	10.0%-19.9%
Haiti	less than 10%
Honduras	no data
Hungary	30.0%-39.9%
Iceland	10.0%-19.9%
India	10.0%-19.9%
Indonesia	30.0%-39.9%
Iran (Islamic Republic of)	10.0%-19.9%
Iraq	10.0%-19.9%
Ireland	20.0%-29.9%
Israel	20.0%-29.9%
Italy	20.0%-29.9%
Jamaica	10.0%-19.9%
Japan	20.0%-29.9%
Jordan	no data
Kazakhstan	20.0%-29.9%
Kenya	10.0%-19.9%
Kiribati	50% and above
Kuwait	10.0%-19.9%

Country	Category
Kyrgyzstan	20.0%-29.9%
Lao People's Democratic Republic	20.0%-29.9%
Latvia	30.0%-39.9%
Lebanon	30.0%-39.9%
Lesotho	20.0%-29.9%
Liberia	less than 10%
Libya	no data
Lithuania	20.0%-29.9%
Luxembourg	20.0%-29.9%
Madagascar	20.0%-29.9%
Malawi	10.0%-19.9%
Malaysia	20.0%-29.9%
Maldives	no data
Mali	10.0%-19.9%
Malta	20.0%-29.9%
Marshall Islands	no data
Mauritania	no data
Mauritius	20.0%-29.9%
Mexico	10.0%-19.9%
Micronesia (Federated States of)	no data
Monaco	no data
Mongolia	20.0%-29.9%
Montenegro	no data
Morocco	10.0%-19.9%
Mozambique	10.0%-19.9%
Myanmar	20.0%-29.9%
Namibia	10.0%-19.9%
Nauru	40.0%-49.9%
Nepal	20.0%-29.9%
Netherlands	20.0%-29.9%
New Zealand	10.0%-19.9%
Nicaragua	no data
Niger	less than 10%
Nigeria	less than 10%
Niue	no data
Norway	10.0%-19.9%
Oman	less than 10%
Pakistan	10.0%-19.9%
Palau	10.0%-19.9%
Panama	less than 10%

Country	Category
Papua New Guinea	no data
Paraguay	10.0%-19.9%
Peru	10.0%-19.9%
Philippines	20.0%-29.9%
Poland	20.0%-29.9%
Portugal	20.0%-29.9%
Qatar	10.0%-19.9%
Republic of Korea	20.0%-29.9%
Republic of Moldova	20.0%-29.9%
Romania	20.0%-29.9%
Russian Federation	20.0%-29.9%
Rwanda	10.0%-19.9%
Saint Kitts and Nevis	no data
Saint Lucia	no data
Saint Vincent and the Grenadines	no data
Samoa	20.0%-29.9%
San Marino	no data
Sao Tome and Principe	less than 10%
Saudi Arabia	10.0%-19.9%
Senegal	less than 10%
Serbia	40.0%-49.9%
Seychelles	20.0%-29.9%
Sierra Leone	20.0%-29.9%
Singapore	10.0%-19.9%
Slovakia	30.0%-39.9%
Slovenia	20.0%-29.9%
Solomon Islands	30.0%-39.9%
Somalia	no data
South Africa	20.0%-29.9%
South Sudan	no data
Spain	20.0%-29.9%
Sri Lanka	10.0%-19.9%
Sudan	no data
Suriname	no data
Swaziland	less than 10%
Sweden	10.0%-19.9%
Switzerland	20.0%-29.9%
Syrian Arab Republic	no data
Tajikistan	no data
Thailand	20.0%-29.9%

Country	Category
The former Yugoslav Republic of Macedonia	no data
Timor-Leste	30.0%-39.9%
Togo	less than 10%
Tonga	30.0%-39.9%
Trinidad and Tobago	no data
Tunisia	20.0%-29.9%
Turkey	20.0%-29.9%
Turkmenistan	no data
Tuvalu	30.0%-39.9%
Uganda	less than 10%
Ukraine	20.0%-29.9%
United Arab Emirates	10.0%-19.9%
United Kingdom of Great Britain and Northern Ireland	10.0%-19.9%
United Republic of Tanzania	10.0%-19.9%
United States of America	20.0%-29.9%
Uruguay	20.0%-29.9%
Uzbekistan	10.0%-19.9%
Vanuatu	20.0%-29.9%
Venezuela (Bolivarian Republic of)	no data
Viet Nam	no data
West Bank and Gaza Strip	no data
Yemen	10.0%-19.9%
Zambia	10.0%-19.9%
Zimbabwe	10.0%-19.9%

AN: WHO did not provide data for French Guiana, Greenland, Western Sahara, Taiwan, or Kosovo. See above and "WHO-Current Tobacco Smoking" tab in this document for the data we downloaded from the WHO to see that these countries/territories are not included. The team coded these countries/territories as "No data" because the WHO has not provided data for them. JA 7/26/19

- **Income level.** WHO estimated that tobacco use prevalence decreased in all income groups from 2000 through 2015 but that, as of 2018, no group was expected to achieve the target of a 30 percent reduction in tobacco use relative to the 2010 level. However, as of 2015, high-income and upper-middle-income countries had experienced a net decrease in the absolute number of current tobacco smokers, while lower-middle-income and low-income countries had experienced an increase in the absolute number of current tobacco smoker numbers.
- **Tobacco type**. Although WHO estimated that most tobacco users smoke tobacco products,

the organization found that as of 2014, a large number of people used smokeless tobacco products. WHO estimated that at least 380 million people, including 13 million children aged 13 to 15 years and 367 million people 15 years or older, used smokeless tobacco globally as of 2014. In addition, WHO estimated that 86 percent of all smokeless tobacco users lived in lower-middle-income countries and that 82 percent lived in Southeast Asia, where smokeless tobacco users 15 years and older were estimated to number more than 300 million. However, according to WHO, less than two-thirds of countries report smokeless tobacco use. WHO recommends monitoring all types of tobacco use to effectively combat the tobacco epidemic. Given the limited data on smokeless tobacco use, WHO reported that its estimates for smokeless tobacco use were likely lower than the actual number of users.

Enclosure III: Comments from the U.S. Agency for International Development

Thomas Melito
Managing Director,
International Affairs and Trade
U.S. Government Accountability Office
441 G Street, N.W.
Washington, D.C. 20226

Re: U.S. Global Tobacco Control (GAO-102876)

Dear Mr. Melito:

I am pleased to provide the formal response of the U.S. Agency for International Development (USAID) to the draft report produced by the U.S. Government Accountability Office (GAO) titled, *U.S. Global Tobacco Control* (GAO-102876).

We thank you for the draft report, which highlights the enormous health burden related to the use of tobacco. USAID does not have any comments on the document.

The draft report is relevant to USAID given its subject's linkages to our global health goals on preventing morbidity and mortality. USAID helps ensure that children have a healthy start to life by addressing the impact of second-hand smoke on newborns. Studies confirm that second-hand smoke contributes to low birthweight, with negative effects on the morbidity and mortality of newborn children. Globally, more than 40 percent of child deaths occur in the newborn period. As the report notes, USAID has funded several related research studies that examine the impact of second-hand smoke on pregnancy and newborn health, and its links to tuberculosis. From Fiscal Years 2015 through 2018, USAID obligated a total of approximately $2.1 million for six tobacco-control research grants in collaboration with the National Academy of Sciences (NAS), two in the Republic of Indonesia and one each to scientists in the Republics of Uganda and The Philippines, the Socialist Republic of Vietnam, and the Arab Republic of Egypt. The GAO report confirms the need to continue to address the related health impacts of tobacco.

I am transmitting this letter from USAID for inclusion in the GAO's final report. Thank you for the opportunity to respond to the draft report, and for the courtesies extended by your staff while conducting this engagement. We appreciate the opportunity to participate in a complete and thorough review of U.S. global tobacco-control efforts.

Sincerely,

Frederick M. Nutt
Assistant Administrator
Bureau for Management

Enclosure: a/s

Accessible Text for Enclosure III: Comments from the U.S. Agency for International Development

Page 1

Thomas Melito

Managing Director,

International Affairs and Trade

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Sincerely,

Frederick M. Nutt

Assistant Administrator

Bureau for Management

Enclosure: a/s

(102876)